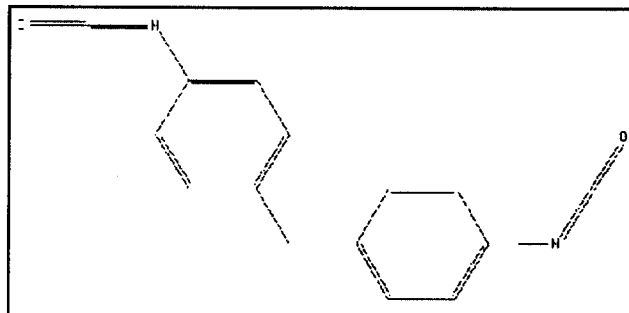


Company Name: International Isocyanate Institute 8EHQ-0692-5043 A
Submission Dated: June 11, 1992
Chemical Name: Diphenylmethane-4,4'-diisocyanate (MDI)
CAS Number: 101-68-6



STUDY DESIGN AND RESULTS:

Topical Sensitization Study in Guinea Pigs (Final Report)

Dosage/route/duration: Eight guinea pigs were exposed topically to a single 400 μ l application of various concentrations (10%, 30%, and 100%) of MDI on the scapular region. Control animals received an equal volume of corn oil alone. Application sites were occluded for 6 hours and the patch then removed. The guinea pigs were challenged subsequently by inhalation exposure to atmospheres containing between 25 and 30 mg/m^3 .

RESULTS:

- No responses were observed in the control group. In guinea pigs treated previously with MDI positive responses were recorded (1/8, 2/8, and 7/8 animals sensitized with 10%, 30% and 100 MDI respectively, exhibited significant changes in respiratory rate following challenge).
- The report states that the data indicates that respiratory hypersensitivity in guinea pigs may result from dermal exposure to MDI.

VOLUNTARY ACTIONS INDICATED: None